

Remarks

Claims 1, 4-6, 9-30, 32-39, 42-44, 47-63, 66, 68, 70-74, and 89-91 are pending in the application. Claims 2, 3, 7, 8, 31, 40, 41, 45, 46, 64, 65, 67, 69, and 75-88 have been canceled without prejudice. The Applicants expressly reserve the right to prosecute in subsequent divisional applications or continuing applications or both claims covering the subject matter of the claim canceled to conform with the Applicants election in response to the Restriction Requirement. 35 U.S.C. §§ 120-121. Claims 27, 28 and 34-37 stand withdrawn as being drawn to a non-elected species. Upon allowance of a generic claim, Applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141.

Claims 1, 5, 12, 13, 17, 21, 22, 29, 39, 43, 50, 51, 55, 59, and 60 have been amended. Support for the claim amendments can be found throughout the application, including the claims as originally filed. Importantly, no new matter has been added to the claims. The amendment to the claims should not be construed to be an acquiescence to any of the rejections. The amendments to the claims are being made solely to expedite the prosecution of the above-identified application. The Applicant reserves the right to further prosecute the same or similar claims in subsequent patent applications claiming the benefit of priority to the instant application. 35 USC § 120.

The Examiner indicated in the Office Action dated May 5, 2004, that claim 29 included the phrase “over a defined period of time” in line 3 which was not part of the prior version of claim 29. The Applicants agree with the Examiner and have amended claim 29 to correct that mistake.

Objection to the Disclosure

The disclosure is objected to by the Examiner for being unclear regarding the definition of certain variables in the Definition section of the specification. The Examiner points out that the amendments to the specification in the Applicants' previous response, dated January 30, 2004, do not correspond to the substituted specification filed May 14, 2001. To avoid confusion, the Examiner has recommended that the Applicants

submit replacement pages for pages 9-12, 22, and 24. The Applicants have followed the Examiner's advice and include at the end of this response replacement pages 9-12, 22, and 24 corresponding to the substituted specification filed May 14, 2001, which include changes which clarify the definition of certain variables.

The Examiner has objected to removing the first full paragraph on page 11 because it alters the definition of the term "alkyl" which appears in the claims. The Applicants have maintained this paragraph in the submitted substituted pages.

The Applicants respectfully submit that the disclosure is clear with respect to its definitions and request the withdrawal of the objection by the Examiner.

Response to Rejections under 35 U.S.C. 112¶1

Paragraph numbers corresponding to the paragraph numbers in the Examiner's office action have been used for clarity.

7. Claims 31 and 67 stand rejected under 35 U.S.C. 112¶1 based on the Examiner's contention that they fail to comply with the written description problem. The Applicants respectfully submit that the rejection has been rendered moot by the canceling of claims 31 and 67.

8. Claims 1-26, 29-33, 38-63, 66-74 and 89-91 stand rejected under 35 U.S.C. 112¶1 based on the Examiner's contention that they fail to comply with the enablement requirement. The Examiner contends that the claimed compounds as defined encompass numerous compounds. The Applicants respectfully traverse this rejection. The Applicants respectfully submit that regarding claims 2, 3, 7, 8, 31, 40, 41, 45, and 46, the rejection is moot in light of the cancellation of these claims. Regarding the remaining claims, independent claims 1 and 39 have been amended to define X as OH, F, Cl, or Br; Y as O, S, or Se, and Z as an optionally substituted alkyl, cycloalkyl, aryl, or -(CH₂)_m-R₈₀ (in claim 1), or Z as an optionally substituted branched alkyl or unbranched C₂-C₇ alkyl, cycloalkyl, aryl, or -(CH₂)_m-R₈₀ (in claim 39). The Applicants respectfully submit that the claims are enabled by the specification. For example, in examples 1-6 in the Examples section of the specification, X is OH. In example 7, X is Cl. In examples 1-7,

Y is O. In examples 1-7, Z is an alkyl, aryl, or an alkyl substituted aryl group. Therefore, the scope of the claims is enabled by the disclosure in the specification.

Accordingly, the Applicants respectfully request the withdrawal of the rejection of the claims under 35 U.S.C. 112¶1.

Response to Rejections under 35 U.S.C. 112¶2

Paragraph numbers corresponding to the paragraph numbers in the Examiner's office action have been used for clarity.

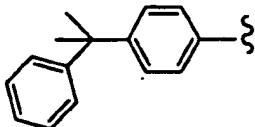
9. Claims 1-26, 29-33, 38-64, 66-74 and 89-91 stand rejected under 35 U.S.C. 112¶2 based on the Examiner's contention that they are indefinite. The Examiner makes several points that are addressed individually below.

The Examiner first contends that the definition of Z in certain dependent claims are not consistent with the definition of Z in the independent claims. In particular, the Examiner does not think that the definition "heteroalkylphenyl" in certain dependent claims are within the scope of the definition of Z in claims 1 and 39. The Applicants respectfully traverse this rejection. Claims 12, 13, 17, 21, 22, 50, 51, 55, 59, and 60 have been amended to remove the term "heteroalkylphenyl" from the definition of Z. Therefore, the claims are definite regarding the definition of Z.

Secondly, the Examiner contends that claims 5, 43 and several other dependent claims are indefinite because although it is clear that alkylphenyl, arylphenyl, or heteroarylphenyl are within the scope of Z, it is not clear how *substituted alkylphenyl*, *substituted arylphenyl*, and *substituted heteroarylphenyl* are within the scope of Z as defined in the independent claims. The Applicants respectfully traverse this rejection. The Applicants have amended claims 5, 12, 13, 17, 21, 22, 43, 50, 51, 55, 59, and 60 to remove the phrase "optionally substituted" preceding alkylphenyl, heteroalkylphenyl, arylphenyl, or heteroarylphenyl. Therefore the claims are definite regarding the definition of Z.

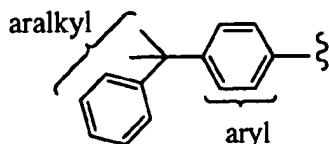
Thirdly, the Examiner contends that claims 6, 44, and several other dependant claims allow Z to represent 4-(1-methyl-1-phenylethyl)phenyl but that it is not clear how

this meets the limitations of Z as set forth in the independent claims. The Applicants respectfully traverse this rejection. 4-(1-Methyl-1-phenylethyl)phenyl is a phenyl ring substituted at the 4-position by an aralkyl group (1-methyl-1-phenylethyl) pictured below.

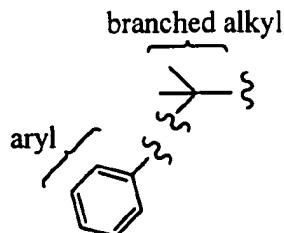


4-(1-methyl-1-phenylethyl)phenyl

The Examiner refers to this definition as an aryl group substituted with an alkaryl-substituted alkyl group or an alkyl-substituted aralkyl group, but that such substituents are not explicitly recited as part of the Markush group in the independent claims. The Applicants respectfully disagree with this definition. An aralkyl group is an alkyl group substituted with an aryl group. The alkyl group is not limited to straight chain alkyl groups as the Examiner asserts (i.e. by saying that 4-(1-methyl-1-phenylethyl)phenyl is a phenyl group substituted with either an alkaryl-substituted alkyl group or an alkyl-substituted aralkyl group, the Examiner is excluding branched alkyl moieties in alkaryl groups). For example, 4-(1-methyl-1-phenylethyl)phenyl fits the definition of an aryl group substituted with an aralkyl group as depicted below:



wherein the aralkyl substituent is broken down as follows:



Therefore, 4-(1-methyl-1-phenylethyl)phenyl is an aryl group substituted with an aralkyl group.

The independent claims clearly define Z as an aryl group (e.g. phenyl) optionally substituted by an aralkyl group. The Applicants respectfully submit that the dependant claims defining Z as 4-(1-methyl-1-phenylethyl)phenyl are within the scope of Z as defined in the independent claims, and, therefore, definite.

The Examiner contends that claim 29 is rendered indefinite by the recitation of "over a defined period of time" with no limitation on the defined period of time. The Applicants respectfully traverse this rejection. As stated previously, claim 29 has been amended to remove the phrase "over a defined period of time." The Applicants respectfully submit that claim 29 is definite as amended.

The Examiner contends that claim 31 is not clear because it is not clear what the % by weight of the compound is measured against. The Applicants respectfully submit that this rejection has been rendered moot by the cancellation of this claim.

Accordingly, the Applicants respectfully request the withdrawal of the rejection of the claims under 35 U.S.C. 112 ¶2.

**Claim Rejections Based on the Judicially-Created
Doctrine of Obviousness-Type Double Patenting**

Claims 39-64, 66-74 and 89-91 stand rejected under the judicially-created doctrine of obviousness-type double patenting, based on the Examiner's contention that they are not patentably distinct from claims 34-58 and 65-78 of copending U.S. Patent Application No. 09/405,299 (the "'299 application"). The Applicants respectfully submit that regarding claims 40, 41, 45, 46, 64, and 69, the rejection is moot in light of the cancellation of these claims. Regarding the remaining claims, to expedite prosecution to allowance of the pending claims, the Applicants submit herewith a Terminal Disclaimer, corresponding to the '299 application cited by the Examiner, that complies with the requirements of 37 CFR 1.321(c). The Disclaimer is accompanied by the appropriate fee, and the Applicants believe that it complies with the requirements of 37 CFR 1.321(c).

Accordingly, withdrawal of the rejections under the judicially-created doctrine of obviousness-type double patenting is respectfully requested.

Fees

The Applicants believe that no additional fees are due in connection with the filing of this paper. Nevertheless, the Director is hereby authorized to charge any additional required fee to our Deposit Account, 06-1448.

Conclusion

In view of the above amendments and remarks, the Applicants believe that the pending claims are in condition for allowance. If a telephone conversation with Applicant's Agent would expedite prosecution of the application, the Examiner is urged to contact the undersigned.

Respectfully submitted,
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